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- (71) Applicant (for all designated States except US): DETROIT R & D, INC. [US/US]; Metro Center for High Tech, Suite 4113, 2727 Second Avenue, Detroit, MI 48201 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KIM, Hyesook [US/US]; 4683 Ravine Drive, Bloomfield Hills, MI 48301 (US). DOMBKOWSKI, Alan, A. [US/US]; 7300 Chichester, Canton, MI 48187 (US). NOVAK, Raymond, F. [US/US]; 4980 Browning Drive, Orchard Lake, MI 48323 (US). HAAB, Brian, B. [US/US]; 2242 Pinewood Street, Jenison, MI 49428 (US).

- (74) Agent: PARIAL, Andrew, M.; Kohn & Associates, PLLC, Suite 410, 30500 Northwestern Highway, Farmington Hills, MI 48334 (US).
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(54) Title: CHIP PRODUCTION, HYBRIDIZATION AND DATA INTERPRETATION FOR ANTIBODY AND PROTEIN MICROARRAYS

(57) Abstract: An antibody microarray screen including a substrate, monoclonal and polyclonal antibodies that are purified immunoglobins, wherein the antibodies are spotted on predetermined positions on the substrate, and fluids unprocessed for immunoglobulin isolation (e.g., anti-sera, ascites fluids, or hybridoma culture media), wherein the unprocessed fluids are spotted on the predetermined positions on the substrate. Production of drug-metabolizing enzyme antibody microarrays containing closely related cytochromes P450 is disclosed. Methods of manufacturing an antibody microarray, an internal control molecule for use in an antibody microarray, a method of determining optimal spotting concentrations of IgG and a method to increase a detectable signal with microarray analysis are disclosed.